

**542** are formed of a more flexible but resilient material such as silicone that is fused at its boundaries with flange **510** and fingers **540**.

**[0090]** While a grip **500** of two integrated materials exhibiting the two different properties (rigid and flexible) can be very useful, it can be expensive to manufacture. As such, in alternative embodiments grip **500** may be manufactured from a single material for the sleeve **505**, fingers **540** and webs **542** with the relative rigidity and flexibility produced through differing thicknesses at different points throughout the grip **500** of the one material rather than necessarily from different materials. For example, the interfaces between the webs **542** and the fingers **540** and flange **510** may incorporate less of the material than between the fingers **540** and the flange **510** thereby to permit webs **542** to be flexed relative to the flange **510** and fingers **540** more than the fingers **540** can flex relative to the flange **510**. In this way, the resilience of fingers **540** with respect to flange **510** can be maintained while reducing the rigidifying effect of the webs **542** between the fingers **540**.

**[0091]** FIG. **20** is a top plan view of the grip **500**, FIG. **21** is a bottom plan view of the grip **500**, FIG. **22** is a perspective bottom view of the grip **500**, FIG. **23** is a perspective top view, partially sectioned, of the grip **500**, FIG. **24** is a perspective bottom view, partially sectioned, of the grip **500**, FIG. **25** is another perspective top view, partially sectioned below the horizontal components of the sleeve **505**, the fingers **540** and the webs **542**, of the grip **500**, FIG. **26** is another perspective bottom view, partially sectioned, of the compression member of FIG. **18**.

**[0092]** The radiopharmaceutical pigs **20** and **200** described and illustrated are particularly suitable for transporting radioactive substances such as liquid and solid radiopharmaceuticals due to the radioactivity-shielding character of the container **24**, but can be adapted to transport other biohazardous products and materials without the use of radioactivity shielding by hermetically sealing the container **24**.

**[0093]** Various embodiments of the present invention comprising been thus described in detail by way of example, it will be apparent to those skilled in the art that variations and modifications may be made without departing from the invention. The invention includes all such variations and modifications as fall within the scope of the appended claims.

**[0094]** For example, while embodiments described herein involve the compartment **24** of body **22** or body **220** being dimensioned to receive only a container of the biohazardous material, embodiments are contemplated in which the compartment **24** is dimensioned to receive a container in addition to a sponge, such as a cellulose sponge, for physically absorbing liquid originally contained within the received container should it escape from the container during transportation or other handling. Some regulators require that there be provided a quantity of sponge that is capable of absorbing twice the volume of liquid to be contained within the container. Such a cellulose sponge may be formed as a slab and positioned at the bottom of compartment **24** underneath the container, but may alternatively be formed as a cup having a bottom and a sleeve dimensioned to receive the container and, in turn, to be received within compartment **24**. The cellulose sponge slab or sleeve would be a consumable.

**[0095]** Furthermore, while handle assembly depicted and describe herein has two struts, alternatives are contemplated having more than two struts, or other structures for encapsulating the body within the handle assembly.

**[0096]** Still further, very thin layers of rubber or other frictional material may be placed at the interfaces between collar **30a** and cap closure **30b** and collar **30a** and body **22** in order to resist inadvertent relative movements when being transported to thereby resist inadvertent exposure to the contents of the container **10**.

What is claimed is:

1. A pig for transporting a container of biohazardous material, wherein the container comprises a bottle and a bottle closure, the pig comprising:

a body comprising a compartment dimensioned to receive the container;

a cap attachable to the body for closing the compartment thereby to shieldingly contain the biohazardous material in the container, the cap comprising:

a collar sealingly engageable with the body and having an opening therethrough in communication with the compartment thereby to provide access to the bottle closure;

a cap closure sealingly engageable within the opening of the collar to sealingly close the opening and cause the bottle closure to be gripped within the cap,

wherein when the collar is disengaged from the body while the cap closure is engaged within the opening of the collar, the container remains gripped within the cap.

2. The pig of claim 1, wherein the cap closure comprises an annulus projecting into the opening for causing the bottle closure to be gripped within the cap.

3. The pig of claim 2, further comprising a compression member dimensioned to be positioned intermediate the bottle closure and the annulus, the compression member being compressed against the bottle closure by the annulus while the cap closure is sealingly engaged within the opening of the collar.

4. The pig of claim 3, wherein the compression member comprises:

a flange;

spaced apart fingers supported by the flange and forming a circle complementary to an inner wall of the annulus, the spaced apart fingers resiliently compressible inwardly against the bottle closure by compressive engagement of the annulus.

5. The pig of claim 4, wherein the compression member comprises lugs extending from the flange and dimensioned to project into complementary bores in a lower edge of the collar.

6. The pig of claim 5, wherein the compression member is formed of a thermoplastic.

7. The pig of claim 1, further comprising a handle assembly encapsulating the body and comprising a handle that is extendable and rotatable through a plurality of orientations with respect to the body.

8. The pig of claim 7, wherein the handle assembly comprises:

an upper collar associated with an upper end of the body;

a lower collar associated with a lower end of the body;

at least two struts extending between the upper collar and the lower collar thereby to maintain the upper collar and the lower collar in a fixed spaced relationship, the handle associated with and extending from the struts.